

Paper for Advanced Topics in Metaphysics Notes

“The Anatomy of the Big Bad Bug”, Rachael Briggs

Stage Setting

- Schism in philosophy of science on nomological properties: does the universe “at bottom” contain any laws, dispositions, or objective chances?
 - Of course the *talk* has these, but is this “theory-laden?”
 - * But can it *in principle* be analyzed away?
 - The debate about Humean Supervenience is whether nomological facts supervene on non-nomological facts.
- The Big Bad Bug is an argument to the effect that objective chances fail to supervene on non-nomological matters of fact.
- Briggs argues that the Big Bad Bug is a stronger argument than many defenders of Humean Supervenience have realized.
- Her work has the following structure:
 1. The groundwork for the Bug by explaining HS in more detail.
 2. State the Bug informally and rephrase it as a formally valid argument.
 3. Map out possible objections to the Bug’s premises, and show that none of them work.

Humean Supervenience

(*HS*): Laws of nature, dispositions, and chances supervene on the distribution of categorical properties in the world (past, present, and future).

- Two clarification remarks:
 1. The term “categorical” is meant to exclude nomologically loaded properties such as dispositions.
 2. This is different from Lewis’ HS.
 - The difference is in that the properties that subven the laws are *local* as well as categorical, intrinsic to point-sized regions or particles.
- HS is crucial to motivation BSA.
 - BSA is a way of cashing out the idea that laws, dispositions, and chances are nothing but regularities in the overall distribution of categorical properties.

(*BSA*): Laws of nature are the theorems of whichever deductive system best summarizes the truth about the past, present, and future distribution of categorical, while balancing the competing theoretical virtues of simplicity, strength, and fit.

 - * Dispositions and chances are defined in terms of BSA.
 - * The BSA is treated as the Bug’s primary target.